47 ... 8/PE
#19
CRF Errors Corrected by the STIC Systems Branch
ENTERED
CRF Processing Date: 12/7/2001
Edited by: _____
Verified by: _____ (STIC staf

Serial Number: 09/836,544

☐ Changed a file from non-ASCII to ASCII

☐ Changed the margins in cases where the sequence text was "wrapped" down to the next line

☐ Edited a format error in the Current Application Data section. specifically: _____

☐ Edited the Current Application Data section with the actual current number. The number inputted by the applicant was ☐ the prior application data; or ☐ other _____.

☐ Added the mandatory heading and subheadings for "Current Application Data".

☐ Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.

☐ Changed the spelling of a mandatory field (the headings or subheadings). specifically: ___

☐ Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were: _____

☐ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited: _____

☐ Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.

☐ Inserted colons after headings/subheadings. Headings edited included: _____

☐ Deleted extra/invalid, headings used by an applicant, specifically: _____

☑ Deleted: ☐ non-ASCII "garbage" at the beginning/end of files; ☐ secretary initials/filename at end of file; ☐ page numbers throughout text; ☐ other invalid text, such as _____

☐ Inserted mandatory headings, specifically: _____

☐ Corrected an obvious error in the response, specifically: _____

☐ Edited identifiers where upper case is used but lower case is required, or vice versa.

☐ Corrected an error in the Number of Sequences field, specifically: _____

☐ A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.

☐ Deleted ending stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a Patentin bug). Sequences corrected: _____

☐ Other: _____

_____

_____

Examiner: The above corrections must be communicated to the applicant in the first Office Action! DO NOT send a copy of this form.

3/1/95

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/836,544

DATE: 12/07/2001
TIME: 19:09:11

Input Set : **A:\PTO.AMC.txt**
Output Set: **N:\CRF3\12072001\I836544.raw**

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 3 <110> APPLICANT: The General Hospital Corporation
 5 <120> TITLE OF INVENTION: Rapid Immunoselection Cloning Method
 7 <130> FILE REFERENCE: 11-88L
 9 <140> CURRENT APPLICATION NUMBER: US 09/836,544
10 <141> CURRENT FILING DATE: 2001-04-17
12 <150> PRIOR APPLICATION NUMBER: US 07/983,647
13 <151> PRIOR FILING DATE: 1992-12-01
15 <150> PRIOR APPLICATION NUMBER: US 07/553,759
16 <151> PRIOR FILING DATE: 1990-07-13
18 <150> PRIOR APPLICATION NUMBER: US 07/498,809
19 <151> PRIOR FILING DATE: 1990-03-23
21 <150> PRIOR APPLICATION NUMBER: US 07/379,076
22 <151> PRIOR FILING DATE: 1989-07-13
24 <150> PRIOR APPLICATION NUMBER: US 07/160,416
25 <151> PRIOR FILING DATE: 1988-02-25
27 <160> NUMBER OF SEQ ID NOS: 37
29 <170> SOFTWARE: PatentIn Ver. 2.0
31 <210> SEQ ID NO: 1
32 <211> LENGTH: 2932
33 <212> TYPE: DNA
34 <213> ORGANISM: Artificial Sequence
36 <220> FEATURE:
37 <223> OTHER INFORMATION: Description of Artificial Sequence: Nucleotide
38       sequence of expression vector, piH3
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45 atactgtcct tctagtgtag ccgtagttag gccaccactt caagaactct gtagcaccgc 180
47 ctacatacct cgctctgcta atcctgttac cagtggctgc tgccagtggc gataagtcgt 240
49 gtcttaccgg gttggactca agacgatagt taccggataa ggcgcagcgg tcgggctgaa 300
51 cggggggttc gtgcacacag cccagcttgg agcgaacgac ctacaccgaa ctgagatacc 360
53 tacagcgtga gctatgagaa agcgccacgc ttcccgaagg gagaaaggcg gacaggtatc 420
55 cggtaagcgg cagggtcgga acaggagagc gcacgaggga gcttccaggg ggaaacgcct 480
57 ggtatcttta tagtcctgtc gggtttcgcc acctctgact tgagcgtcga ttttgtgat 540
59 gctcgtcagg ggggcggagc ctatggaaaa acgccagcaa cgccgaatta ccgcggtgtt 600
61 tctcaacgta acactttaca gcggcgcgtc atttgatatg atgcgccccg cttcccgata 660
63 agggagcagg ccagtaaaag cattacccgt ggtggggttc ccgagcggcc aaaggagca 720
65 gactctaaat ctgccgtcat cgacttcgaa ggttcgaatc cttcccccac caccatcact 780
67 ttcaaaagtc cgaaagaatc tgctccctgc ttgtgtgttg gaggtcgctg agtagtgcgc 840
69 gagtaaaatt taagctacaa caaggcaagg cttgaccgac aattgcatga agaatctgct 900
71 tagggttagg cgttttgcgc tgcttcgcga tgtacgggcc agatatacgc gttgacattg 960
73 attattgact agttattaat agtaatcaat tacggggtca ttagttcata gcccatatat 1020
75 ggagttccgc gttacataac ttacgtaaa tggcccgcct ggctgaccgc ccaacgaccc 1080
77 ccgcccattg acgtcaataa tgacgtatgt tcccatagta acgccaatag ggactttcca 1140
79 ttgacgtcaa tgggtggact atttacggta aactgcccac ttggcagtac atcaagtgta 1200
81 tcatatgcca agtacgcccc ctattgacgt caatgacggt aaatggcccg cctggcatta 1260
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 89 aaatcaacgg gactttccaa aatgtcgtaa caactccgcc ccattgacgc aaatgggcgg 1500
 91 aattcctggg cgggactggg gagtggcgag ccctcagatg ctgcatataa gcagctgctt 1560
 93 tttgcctgta ctgggtctct ctggttagac cagatctgag cctgggagct ctctggctaa 1620
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 97 tcttccatac ctaccagttc tgcgcctgca ggtcgcggcc gcgactctag aggatctttg 1740
 99 tgaaggaacc ttacttctgt ggtgtgacat aattggacaa actacctaca gagatttaaa 1800
101 gctctaaggt aaatataaaa tttttaagtg tataatgtgt taaactactg attctaattg 1860
103 tttgtgtatt ttagattcca acctatggaa ctgatgaatg ggagcagtgg tggaatgcct 1920
105 ttaatgagga aaacctgttt tgctcagaag aaatgccatc tagtgatgat gaggctactg 1980
107 ctgactctca acattctact cctccaaaaa agaagagaaa ggtagaagac cccaaggact 2040
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113 aatattctgt aacctttata agtaggcata acagttataa tcataacata ctgttttttc 2220
115 ttactccaca caggcataga gtgtctgcta ttaataacta tgctcaaaaa ttgtgtacct 2280
117 ttagcttttt aatttgtaaa ggggttaata aggaatattt gatgtatagt gccttgacta 2340
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135 tgactaattt ttttatttta tgcagaggcc gaggccgcct cggcctctga gctattccag 2880
137 aagtagtgag gaggcttttt tggaggccta ggcttttgca aaaagctaat tc         2932
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141 <211> LENGTH: 1504
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143 <213> ORGANISM: Homo sapiens
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146 <221> NAME/KEY: CDS
147 <222> LOCATION: (7)..(1059)
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152         1               5                  10
154 ttc aat gtt tct tcc aaa ggt gca gtc tcc aaa gag att acg aat gcc     96
155 Phe Asn Val Ser Ser Lys Gly Ala Val Ser Lys Glu Ile Thr Asn Ala
156  15               20                  25                  30
158 ttg gaa acc tgg ggt gcc ttg ggt cag gac atc aac ttg gac att cct    144
159 Leu Glu Thr Trp Gly Ala Leu Gly Gln Asp Ile Asn Leu Asp Ile Pro
160              35                  40                  45
162 agt ttt caa atg agt gat gat att gac gat ata aaa tgg gaa aaa act    192
163 Ser Phe Gln Met Ser Asp Asp Ile Asp Asp Ile Lys Trp Glu Lys Thr
164          50                  55                  60
166 tca gac aag aaa aag att gca caa ttc aga aaa gag aaa gag act ttc    240
167 Ser Asp Lys Lys Lys Ile Ala Gln Phe Arg Lys Glu Lys Glu Thr Phe
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                                        70                    75
168              65
170 aag gaa aaa gat aca tat aag cta ttt aaa aat gga act ctg aaa att       288
171 Lys Glu Lys Asp Thr Tyr Lys Leu Phe Lys Asn Gly Thr Leu Lys Ile
172        80                        85                    90
174 aag cat ctg aag acc gat gat cag gat atc tac aag gta tca ata tat       336
175 Lys His Leu Lys Thr Asp Asp Gln Asp Ile Tyr Lys Val Ser Ile Tyr
176 95                          100                105              110
178 gat aca aaa gga aaa aat gtg ttg gaa aaa ata ttt gat ttg aag att       384
179 Asp Thr Lys Gly Lys Asn Val Leu Glu Lys Ile Phe Asp Leu Lys Ile
180                    115                120                125
182 caa gag agg gtc tca aaa cca aag atc tcc tgg act tgt atc aac aca       432
183 Gln Glu Arg Val Ser Lys Pro Lys Ile Ser Trp Thr Cys Ile Asn Thr
184        130                    135                140
186 acc ctg acc tgt gag gta atg aat gga act gac ccc gaa tta aac ctg       480
187 Thr Leu Thr Cys Glu Val Met Asn Gly Thr Asp Pro Glu Leu Asn Leu
188        145                    150                155
190 tat caa gat ggg aaa cat cta aaa ctt tct cag agg gtc atc aca cac       528
191 Tyr Gln Asp Gly Lys His Leu Lys Leu Ser Gln Arg Val Ile Thr His
192        160                    165                170
194 aag tgg acc acc agc ctg agt gca aaa ttc aag tgc aca gca ggg aac       576
195 Lys Trp Thr Thr Ser Leu Ser Ala Lys Phe Lys Cys Thr Ala Gly Asn
196 175                    180                185                190
198 aaa gtc agc aag gaa tcc agt gtc gag cct gtc agc tgt cca gag aaa       624
199 Lys Val Ser Lys Glu Ser Ser Val Glu Pro Val Ser Cys Pro Glu Lys
200                    195                200                205
202 ggt ctg gac atc tat ctc atc att ggc ata tgt gga gga ggc agc ctc       672
203 Gly Leu Asp Ile Tyr Leu Ile Ile Gly Ile Cys Gly Gly Gly Ser Leu
204        210                    215                220
206 ttg atg gtc ttt gtg gca ctg ctc gtt ttc tat atc acc aaa agg aaa       720
207 Leu Met Val Phe Val Ala Leu Leu Val Phe Tyr Ile Thr Lys Arg Lys
208        225                    230                235
210 aaa cag agg agt cgg aga aat gat gag gag ctg gag aca aga gcc cac       768
211 Lys Gln Arg Ser Arg Arg Asn Asp Glu Glu Leu Glu Thr Arg Ala His
212        240                    245                250
214 aga gta gct act gaa gaa agg ggc cgg aag ccc cac caa att cca gct       816
215 Arg Val Ala Thr Glu Glu Arg Gly Arg Lys Pro His Gln Ile Pro Ala
216 255                    260                265                270
218 tca acc cct cag aat cca gca act tcc caa cat cct cct cca cca cct       864
219 Ser Thr Pro Gln Asn Pro Ala Thr Ser Gln His Pro Pro Pro Pro Pro
220                    275                280                285
222 ggt cat cgt tcc cag gca cct agt cat cgt ccc ccg cct cct gga cac       912
223 Gly His Arg Ser Gln Ala Pro Ser His Arg Pro Pro Pro Pro Gly His
224                    290                295                300
226 cgt gtt cag cac cag cct cag aag agg cct cct gct ccg tcg ggc aca       960
227 Arg Val Gln His Gln Pro Gln Lys Arg Pro Pro Ala Pro Ser Gly Thr
228        305                    310                315
230 caa gtt cac cag cag aaa ggc ccg ccc ctc ccc aga cct cga gtt cag       1008
231 Gln Val His Gln Gln Lys Gly Pro Pro Leu Pro Arg Pro Arg Val Gln
232        320                    325                330
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Input Set : A:\PTO.AMC.txt
Output Set: N:\CRF3\12072001\I836544.raw

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234 cca aaa cct ccc cat ggg gca gca gaa aac tca ttg tcc cct tcc tct   1056
235 Pro Lys Pro Pro His Gly Ala Ala Glu Asn Ser Leu Ser Pro Ser Ser
236 335                 340                 345                 350
238 aat taaaaaagat agaaactgtc tttttcaata aaaagcactg tggatttctg         1109
239 Asn
241 ccctcctgat gtgcatatcc gtacttccat gaggtgtttt ctgtgtgcag aacattgtca   1169
243 cctcctgagg ctgtgggcca cagccacctc tgcatcttcg aactcagcca tgtggtcaac   1229
245 atctggagtt tttggtctcc tcagagagct ccatcacacc agtaaggaga agcaatataa   1289
247 gtgtgattgc aagaatggta gaggaccgag cacagaaatc ttagagattt cttgtcccct   1349
249 ctcaggtcat gtgtagatgc gataaatcaa gtgattggtg tgcctgggtc tcactacaag   1409
251 cagcctatct gcttaagaga ctctggagtt tcttatgtgc cctggtggac acttgcccac   1469
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257 <211> LENGTH: 351
258 <212> TYPE: PRT
259 <213> ORGANISM: Homo sapiens
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266                 20                  25                  30
268 Thr Trp Gly Ala Leu Gly Gln Asp Ile Asn Leu Asp Ile Pro Ser Phe
269             35                  40                  45
271 Gln Met Ser Asp Asp Ile Asp Asp Ile Lys Trp Glu Lys Thr Ser Asp
272         50                  55                  60
274 Lys Lys Lys Ile Ala Gln Phe Arg Lys Glu Lys Glu Thr Phe Lys Glu
275 65                  70                  75                  80
277 Lys Asp Thr Tyr Lys Leu Phe Lys Asn Gly Thr Leu Lys Ile Lys His
278                 85                  90                  95
280 Leu Lys Thr Asp Asp Gln Asp Ile Tyr Lys Val Ser Ile Tyr Asp Thr
281                 100                 105                 110
283 Lys Gly Lys Asn Val Leu Glu Lys Ile Phe Asp Leu Lys Ile Gln Glu
284             115                 120                 125
286 Arg Val Ser Lys Pro Lys Ile Ser Trp Thr Cys Ile Asn Thr Thr Leu
287         130                 135                 140
289 Thr Cys Glu Val Met Asn Gly Thr Asp Pro Glu Leu Asn Leu Tyr Gln
290 145                 150                 155                 160
292 Asp Gly Lys His Leu Lys Leu Ser Gln Arg Val Ile Thr His Lys Trp
293                 165                 170                 175
295 Thr Thr Ser Leu Ser Ala Lys Phe Lys Cys Thr Ala Gly Asn Lys Val
296             180                 185                 190
298 Ser Lys Glu Ser Ser Val Glu Pro Val Ser Cys Pro Glu Lys Gly Leu
299         195                 200                 205
301 Asp Ile Tyr Leu Ile Ile Gly Ile Cys Gly Gly Gly Ser Leu Leu Met
302     210                 215                 220
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305 225                 230                 235                 240
307 Arg Ser Arg Arg Asn Asp Glu Glu Leu Glu Thr Arg Ala His Arg Val
308                 245                 250                 255
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RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/836,544

DATE: 12/07/2001
TIME: 19:09:11

Input Set : A:\PTO.AMC.txt
Output Set: N:\CRF3\12072001\I836544.raw

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313 Pro Gln Asn Pro Ala Thr Ser Gln His Pro Pro Pro Pro Pro Gly His
314          275                   280               285
316 Arg Ser Gln Ala Pro Ser His Arg Pro Pro Pro Pro Gly His Arg Val
317          290                   295               300
319 Gln His Gln Pro Gln Lys Arg Pro Pro Ala Pro Ser Gly Thr Gln Val
320 305                   310               315                   320
322 His Gln Gln Lys Gly Pro Pro Leu Pro Arg Pro Arg Val Gln Pro Lys
323                   325               330                   335
325 Pro Pro His Gly Ala Ala Glu Asn Ser Leu Ser Pro Ser Ser Asn
326          340                   345               350
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330 <211> LENGTH: 874
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332 <213> ORGANISM: Homo sapiens
334 <220> FEATURE:
335 <221> NAME/KEY: CDS
336 <222> LOCATION: (13)..(723)
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341                1                   5                   10
343 ctc agc gtg gtc tgc ctg ctg cac tgc ttt ggt ttc atc agc tgt ttt 99
344 Leu Ser Val Val Cys Leu Leu His Cys Phe Gly Phe Ile Ser Cys Phe
345          15                  20                  25
347 tcc caa caa ata tat ggt gtt gtg tat ggg aat gta act ttc cat gta 147
348 Ser Gln Gln Ile Tyr Gly Val Val Tyr Gly Asn Val Thr Phe His Val
349 30                  35                  40                  45
351 cca agc aat gtg cct tta aaa gag gtc cta tgg aaa aaa caa aag gat 195
352 Pro Ser Asn Val Pro Leu Lys Glu Val Leu Trp Lys Lys Gln Lys Asp
353                  50                  55                  60
355 aaa gtt gca gaa ctg gaa aat tct gaa ttc aga gct ttc tca tct ttt 243
356 Lys Val Ala Glu Leu Glu Asn Ser Glu Phe Arg Ala Phe Ser Ser Phe
357                  65                  70                  75
359 aaa aat agg gtt tat tta gac act gtg tca ggt agc ctc act atc tac 291
360 Lys Asn Arg Val Tyr Leu Asp Thr Val Ser Gly Ser Leu Thr Ile Tyr
361          80                  85                  90
363 aac tta aca tca tca gat gaa gat gag tat gaa atg gaa tcg cca aat 339
364 Asn Leu Thr Ser Ser Asp Glu Asp Glu Tyr Glu Met Glu Ser Pro Asn
365          95                  100                 105
367 att act gat acc atg aag ttc ttt ctt tat gtg ctt gag tct ctt cca 387
368 Ile Thr Asp Thr Met Lys Phe Phe Leu Tyr Val Leu Glu Ser Leu Pro
369 110                  115                 120                 125
371 tct ccc aca cta act tgt gca ttg act aat gga agc att gaa gtc caa 435
372 Ser Pro Thr Leu Thr Cys Ala Leu Thr Asn Gly Ser Ile Glu Val Gln
373                  130                 135                 140
375 tgc atg ata cca gag cat tac aac agc cat cga gga ctt ata atg tac 483
376 Cys Met Ile Pro Glu His Tyr Asn Ser His Arg Gly Leu Ile Met Tyr
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12/7/01

VERIFICATION SUMMARY
PATENT APPLICATION: US/09/836,544

DATE: 12/07/2001
TIME: 19:09:12

Input Set : **A:\PTO.AMC.txt**
Output Set: **N:\CRF3\12072001\I836544.raw**